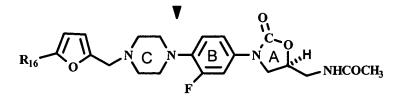
Amendments to the Claims

- 1. Cancelled.
- 2. Cancelled.
- 3. Cancelled.
- 4. Cancelled.
- 5. Cancelled.
- 6. Cancelled.
- 7. Cancelled.
- 8. Cancelled.
- 9. Cancelled.
- 10. Cancelled.
- 11. Cancelled.
- 11. Cancelled.
- 12. Cancelled.
- 13. Cancelled.
- 14. Cancelled.
- 15. Cancelled.
- 16. (Original) A process for preparing a compound of Formula XI



FORMULA XI

 $(R_{16} = -CH_2F \text{ or } -CH_2F_2)$ by reacting a compound of Formula IX

$$H \xrightarrow{O} O \xrightarrow{N \subset N} \xrightarrow{B} N \xrightarrow{Q \downarrow Q \downarrow Q \downarrow N} NHCOCH^{3}$$

FORMULA IX

with sodium borohydride to produce a compound of Formula X

FORMULA X

and further reacting this compound with diethylamino sulfurtrifluoride to produce compound of Formula XI.

17. (Original) A process for preparing a compound of Formula XII

FORMULA XII

wherein $R_{17} = \sum_{N=0H}$ which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX

FORMULA IX

with hydroxylamine.

MEHTA et al. Serial No. 10/051,784

Filed: 1/17/2002 Page 5

18. (Original) A process for preparing a compound of Formula XII

FORMULA XII

wherein $R_{17} = \sum_{N=NH_2} \text{which comprises reacting (S)-N-[[3-[3-Fluoro-4[N-1-[4-{2-furyl-(5-hydrazone)-methyl}]-piperazinyl]-phenyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide with hydrazine hydrate.$

19. (Original) A process for preparing a compound of Formula XII

FORMULA XII

wherein $R_{17} = -C_{NH} - C_{H_2COOCH_3}$ which comprises reacting (S)-N-[[3-[3-Fluoro-4-[N-1-[4-(2-furyl-(5-aldoxime)methyl]] piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide with isocyanate.

20. (Original) A process for preparing a compound of Formula XII

FORMULA XII

wherein R_{17} = CN which comprises reacting (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-cyano)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide with trifilic anhydride and triethylamine.

Page 6

21. (Original) A process for preparing a compound of Formula XII

FORMULA XII

wherein R17 = $-c\dot{h}$ which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[5-(1,3-dioxane)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide with 1,3-propane diol and BF₃ etherate.

22. (Original) A process for the preparation of the compound of Formula XIV

FORMULA XIV

wherein $R_{18} = \frac{O}{C}_{NH_2}$ which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]] piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX

FORMULA IX

with Ag₂O to produce (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}]-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII followed by reacting (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl- (5-carboxyethyl)methyl)piperazinyl] phenyl]- 2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII

Page 7

FORMULA XIII

with aqueous ammonia to produce Formula XIV.

23. (Original) A process for the preparation of the compound of Formula XIV

FORMULA XIV

wherein
$$R_{18} = \frac{10^{10}}{10^{10}}$$
 which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]]

piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX

with Ag₂O to produce (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}]-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII followed by reacting (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl- (5-carboxyethyl)methyl)piperazinyl] phenyl]- 2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII

Page 8

FORMULA XIII

with thionyl chloride to produce Formula XIV.

24. (Original) A process for the preparation of the compound of Formula XIV

$$R_{18} = 0$$

$$N = 0$$

FORMULA XIV

wherein
$$R_{18} = 0$$
 C
 N
NHBOC

which comprises reacting (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}] piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula IX

FORMULA IX

with Ag_2O to produce (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}}]-piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII followed by reacting (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl- (5-carboxyethyl)methyl)piperazinyl] phenyl]- 2-oxo-5-oxazolidinyl]methyl] acetamide of Formula XIII

Page 9

FORMULA XIII

with morpholine in the presence of oxalyl chloride to produce Formula XIV.

25. (Currently Amended) A compound having the structure of Formula I

FORMULA I

and its pharmaceutically acceptable salts, enantiomers, diastereomers, or N-oxides, wherein T is five- to seven-membered heterocyclic ring, aryl, substituted aryl, bound to the ring C with a linker W and the heterocyclic and aryl rings are further substituted by a group represented by R, wherein R is selected from the group consisting of hydrogen.alkyl (C1-6), halogen. CN, COR5, COOR5, N(R6,R7), CON (R6, R7), CH2NO2, NO2, CH2R8, CHR9, -CH = N-OR10, -C=CH-R5, wherein R5 is selected from the group consisting of H, optionally substituted C1-C12, alkyl, C3-12, cycloalkyl, aryl, heteroaryl; R6 and R7 are independently selected from the group consisting of H, optionally substituted C1-12 alkyl, C3-12 cycloalkyl, C1-6 alkoxy; R8 and R9 are independently selected from the group consisting of H, C1-6 alkyl, F, Cl, Br, C1-12 alkyl substituted with one or more of F, Cl, Br, I, OR4, SR4, N(R6,R7) wherein R4 is selected from the group consisting of H, C1-12 alkyl, C3-12 cycloalkyl, C1-6 alkoxy, C1-6 alkyl substituted with one or more F, Cl, Br, I or OH and R6 and R7 are the same as defined earlier, R10 is selected from the

group consisting of H, optionally substituted from H, optionally substituted C_{1-12} alkyl, C_{3-512} cycloalkyl, C_{1-6} , alkoxy, C_{1-6} alkyl, aryl, heteroaryl;

n is 1;

X is N

Y and Z are independently selected from the group consisting of hydrogen, C₁₋₆ alkyl, and C₃₋₁₂ cycloalkyl;

U and V are independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, and C_{1-12} alkyl substituted with one or more of F, Cl, Br, I;

W is selected from the group CH_2 , CO, CH_2NH , $NHCH_2$, CH_2NHCH_2 , CH_2NHC

 R_1 is selected from the group consisting of - NHC(=O) R_2 wherein R_2 is hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH; $N(R_3, R_4)$; -NR₂C(=S) R_3 ; -NR₂C(=S)SR₃ wherein R_2 is the same as defined above and R_3 and R_4 are independently selected from the group consisting of H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH;

with the proviso that when R_1 is NHAc, and one of U or V is halogen, and W is (CO), and T is isoxazole, then R cannot be cyano, $(C(O)NH_2, C(O)N(CH_3)_2, CO_2H, or CH_3, and when <math>R_1$ is NHAc, and one of U or V is halogen, and W is CH_2 , and T is isoxazole, then R cannot be CH_3 .

MEHTA et al. Serial No. 10/051,784

Filed: 1/17/2002 Page 11

26. (Currently Amended) A compound having structure of Formula II

FORMULA II

and its pharmaceutically acceptable salts, enantiomers, diastereomers, or N-oxides, wherein M= O, S, NH, N-CH₃;

X is N;

Y and Z are independently selected from the group consisting of hydrogen, C_{1-6} alkyl, and C_{3-12} cycloalkyl;

U and V are independently selected from the group consisting of hydrogen, optionally substituted C₁₋₆ alkyl, F, Cl, Br, and C₁₋₁₂ alkyl substituted with one or more of F, Cl, Br, I; W is selected from the group consisting of CH₂, CO, CH₂NH, NHCH₂, CH₂NHCH₂, CH₂-N (R₁₁) CH₂, CH₂(R₁₁) N, CH (R₁₁), S, CH₂(CO), NH wherein R₁₁ is optionally substituted with C₁₋₁₂ alkyl, C₃₋₁₂ cycloalkyl, C₁₋₆ alkoxy, C₁₋₆ alkyl, aryl, heteroaryl except when M=S, Q=P=H, W=(C=O) with the proviso that when M is sulphur, and when W is (CO), then Q and P cannot be hydrogen;

n is 1; and,

Q and P are independently selected from the group consisting of <u>hydrogen</u>, -CN, COR_5 , $COOR_5$, $N(R_6, R_7)$, $CON(R_6, R_7)$, CH_2NO_2 , NO_2 , CH_2R_8 , CHR_9 , -CH=N-OR₁₀, C=CH-R₅, wherein R₅ is selected from the group consisting of H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, aryl, heteroaryl; R_6 and R_7 are independently selected from the group consisting of H, optionally

Filed: 1/17/2002 Page 12

substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from the group consisting of H, C_{1-6} alkyl ,F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, OR₄, SR₄, wherein R₄ is selected from the group consisting of H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more F, Cl, Br, I or OH, N(R₆, R₇), R₁₀ is selected from the group consisting of H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl except W= (CO), Q and P=H and M=S, wherein M=Sulphur and Oxygen-as shown by Formulae III and IV respectively,

FORMULA III

Formula IV

wherein P, Q, U, V, X, Y, Z, W and n in Formulae III and IV as defined earlier for Formula I.

- 27. (Currently Amended) A compound selected from the group consisting of
 - 1. (S)-N-[[3-[3-Fluoro-4-[N-1-[4-(2-furoyl) piperazinyl]]phenyl]-2-oxo-5-oxazolidinyl] methyl]acetamide
 - 2. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-formyl)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide

- 3. (S)-N-[[3-Fluoro-4-[N-1[4-(2-furyl-(5-carboxyethyl)methyl)piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 4. (S)-N-[[3-Fluoro-4-[N-1[4-(5-bromo-2-furoyl)]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl] methyl]acetamide
- 5. (S)-N-[[3-Fluoro-4-[N-1[4-(5-chloromethyl-2-furoyl)piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 6. (S)-N-[[3-Fluoro-4-[N-1[4-(5-nitro-2-furoyl)piperazinyl]phenyl]-2-oxo-5-oxazolidinyl] methyl]acetamide
- 7. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-(2-thienyl)dicarbonyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 8. (S)-N[[3-[3-Fluoro-4-[N-1[4-(3-furoyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl] acetamide
- 9. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-bromo)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 10. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(5-chloro)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 11. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2-furylmethyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl] methyl]acetamide
- 12. (S)-N-[[3-[3-Fluoro-4-[N-1[4-(2-thienylmethyl)]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 13. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2-thienylacetyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl] methyl]acetamide
- 14. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(4-bromo)methyl}]piperazinyl] phenyl]-2 oxo-5-oxazolidinyl]methyl]acetamide
- 15. (S)-N-[[3-[3-fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide.
- 16. Hydrochloric salt of (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-nitro)methyl}]piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 17. Citrate salt of (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-nitro)methyl}]piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 18. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2-pyrrolylmethyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide

- 19. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(3-methyl)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 20. (S)-N[[3-[3-Fluoro-4-[N-1[4-(3-furylmethyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl] methyl]acetamide
- 21. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(5-methyl)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 22. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-pyrrole(1-methyl)methyl}]piperazinyl] phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 23. (S)-N[[3-[3-Fluoro-4-[N-1[4-{2-thienyl(5-nitro)methyl}]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 24. (S)-N[[3-[3-Fluoro-4-[N-1[4-[2-furyl{5-(N-thiomorpholinyl)methyl]methyl]piperazinyl] phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 25. (S)-N[[3-[3-Fluoro-4-[N-1[4-[2-furyl{5-(N-morpholinyl)methyl}]methyl]]piperazinyl] phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 26. (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-acetoxymethyl)methyl}]piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 27. (S)-N-[[3-Fluoro-4-[N-1[4-{2-thienyl(5-bromo)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 28. (S)-N-[[3-Fluoro-4-[N-1[4-(5-nitro-2-furylmethyl)piperazinyl] phenyl]- 2-oxo oxazolidinyl]methyl]dichloroacetamide
- 29. (S)-N[[3-[3-Fluoro-4-[N-1[4-(5-nitro-2-thienoyl)]piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide hydrochloride
- 30. (S)-N[[3-[3-Fluoro-4-[N-1[4-(2',2'-diphenyl-2' hydroxy acetyl)] piperazinyl]phenyl]2-oxo-5-oxazolidinyl]methyl]acetamide
- 59. (S)-N-[[3-[3-fluoro-4-[N-1 {2-furyl-[4-(5-difluoromethyl) methyl] piperazinyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide.
- 60. (S)-N-[[3-[3-Fluoro-4-[N-1-[4-(2-furyl-(5-aldoxime)methyl]] piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 61. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-aldoxime(methyl-4-(N-carboxyaminophenyl acetate) methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide

- 62. (S)-N-[[3-[3-Fluoro-4[N-1-[4-{2-furyl-(5-hydrazone)-methyl}]-piperazinyl]-phenyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide
- 63. (S)-N-[[3-[3-fluoro-4-[N-1 {2-furyl-[4-(5-difluoromethyl) methyl}]piperazinyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide
- 64. (S)-N-[[3-[3-Fluoro-4-[N-1-[4-(2-furyl-(5-aldoxime)methyl]] piperazinyl] phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 65. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-aldoxime(methyl-4-(N-carboxyaminophenyl acetate) methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 66. (S)-N-[[3-[3-Fluoro-4[N-1-[4-{2-furyl-(5-hydrazone)-methyl}]-piperazinyl]-phenyl]-2-oxo-5-oxazolidinyl]-methyl]acetamide
- 67. (S)-N-[[3-[3-Fluoro-4-[N-1 {2-furyl-[4-(5-hydroxymethyl)methyl}] piperazinyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 68. (S)-N-[[3-[3-Fluoro-4-[N-1[4-{2-furyl(5-cyano)methyl}] piperazinyl]phenyl] -2-oxo-5-oxazolidinyl]methyl]acetamide
- 69. (S)-N-[[3-Fluoro-4-[N-1[4-{2-furyl(5-carboxy)methyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
- 70. (S)-N-[[3-Fluoro-4-[N-1[5-(1,3-dioxane)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
- 71. (S)-N-[[3-Fluoro-4-[N-1[5-(formamido)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
- 72. (S)-N-[[3-Fluoro-4-[N-1[5-(morpholine-1-carbonyl)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
- 73. (S)-N-[[3-Fluoro-4-[N-1[5-(4-(tert butoxy carbonyl)amino piperidine)-2-furylmethyl]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl] acetamide
- 74. (S)-N-[[3-Fluoro-4-[N-1[4-{(Z)-2-methoxyimino-2-(2-furyl)acetyl}]piperazinyl]phenyl]-2-oxo-5-oxazolidinyl]methyl]acetamide
- 28. (Previously Added) A pharmaceutical composition comprising the compound of claims 25, 26, or 27 and a pharmaceutically acceptable carrier.
- 29. (Previously Added) A pharmaceutical composition comprising a pharmaceutically effective amount of compound according to claims 25, 26 or 27, or a physiologically acceptable

acid addition salt thereof with a pharmaceutically acceptable carrier for treating microbial infections.

- 30. (Previously Added) A method of treating or preventing microbial infections in a mammal comprising administering to the said mammal, the pharmaceutical composition according to claim 29.
- 31. (Currently Amended) A process for preparing a compound of Formula I

$$R - T - W - X C N - B N A O$$

$$Z$$

$$C N - V B N A O$$

$$R1$$

FORMULA I

and its pharmaceutically acceptable salts, enantiomers, diastereomers, or N-oxides, wherein T is five to seven membered heterocyclic ring, aryl, substituted aryl, bound to the ring C with a linker w and the heterocyclic and aryl rings are further substituted by a group represented by \mathbf{R} , wherein R is selected from the group consisting of hydrogen...-CN, COR5,COOR5, N(R6,R7), CON (R6, R7), CH2NO2, NO2, CH2R8, CHR9, -CH = N-OR10, -C=CH-R5, wherein R5 is selected from the group consisting of H, optionally substituted C1-C12, alkyl, C3-12, cycloalkyl, aryl, heteroaryl, R6 and R7, are independently selected from the group consisting of H, optionally substituted C1-12 alkyl, C3-12 cycloalkyl, C1-6 alkoxy; R8 and R9 are independently selected from the group consisting of H, C1-6 alkyl, F, Cl, Br, C1-12 alkyl substituted with one or more of F, Cl, Br, I, OR4, SR4, N(R6,R7) wherein R4 is selected from the group consisting of H, C1-12 alkyl, C3-12 cycloalkyl, C1-6 alkoxy, C1-6 alkyl substituted with one or more F, Cl, Br, I or OH and R6 and R7 are the same as defined earlier, R10 is selected from the group consisting of H, optionally substituted from H, optionally substituted C1-12 alkyl, C3-512 cycloalkyl, C1-6, alkoxy, C1-6 alkyl, aryl, heteroaryl;

n is 1;

X is N;

Y and Z are independently selected from the group consisting of hydrogen, C_{1-6} alkyl, and C_{3-12} cycloalkyl;

U and V are independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, and C_{1-12} alkyl substituted with one or more of F, Cl, Br, I;

W is selected from the group consisting of CH_2 , CO, CH_2NH , $NHCH_2$, CH_2NHCH_2 , CH_2 CH_3 , CH_4 , CH_4 , CH_5 , CH_6 , CH

 R_1 is selected from the group consisting of - NHC(=O) R_2 wherein R_2 is hydrogen, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH; N(R_3 , R_4); -NR₂C(=S) R_3 : -NR₂C(=S)SR3 wherein R_2 is the same as defined above and R_3 and R_4 are independently selected from the group consisting of H, C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy, C_{1-6} alkyl substituted with one or more of F, Cl, Br, I or OH,

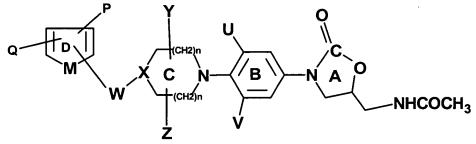
which comprises reacting an amine compound of Formula V

FORMULA V

with a heterocyclic compound of Formula R-T-W- R_{12} wherein G in amines of Formula V is defined as NH and Y, Z, U, V, R_1 , n, R, T and W are the same as defined earlier and R_{12} is a leaving group selected from the group consisting of <u>-CHO</u>, fluoro, chloro, bromo, SCH₃, -SO₂CH₃, -SO₂CF₃ or OC₆H₅;

with the proviso that when R₁ is NHAc, and one of U or V is halogen, and W is (CO), and T is isoxazole, then R cannot by cyano, C(O)NH₂, C(O)N(CH₃)₂, CO₂H, or CH₃, and when R₁ is NHAc, and one of U or V is halogen, and W is CH₂, and T is isoxazole, then R cannot be CH₃.

- 32. (Currently Amended) A process for preparing a compound of Formula I as claimed in claim 31, wherein $W=CH_2$ and $R-T-W-R_{12}$ is a five membered heterocyclic ring with aldehyde group and the compound of Formula I is produced by reductive amination with the proviso that when R_1 is HHAc, and one of U or V is halogen, and W is CH_2 , and T is isoxazole, then R cannot be CH_3 .
- 33. (Previously Added) A process for preparing a compound of Formula I as claimed in claim 31, wherein W = CO and R-T-W- R_{12} is a five membered heterocyclic ring with carboxylic acid, and amino compound of Formula V is acylated with activated esters in presence of condensing agents comprising 1,3-dicyclohexylcarbodiimide (DCC) and 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide (EDC).
- 34. (Currently Amended) A process for the preparation of compound of Formula II



FORMULA II

wherein

n is 1;

X is N;

Y and Z are independently selected from the group consisting of hydrogen, C_{1-6} alkyl, and C_{3-12} cycloalkyl;

U and V are independently selected from the group consisting of hydrogen, optionally substituted C_{1-6} alkyl, F, Cl, Br, and C_{1-12} alkyl substituted with one or more of F, Cl, Br, I;

W is selected from the group consisting of CH_2 , CO, CH_2 NH, $NHCH_2$, CH_2 NHCH $_2$, CH_2 NHCH $_2$, CH_2 NHCH $_2$, CH_2 (R11) N, CH(R₁₄), S, CH_2 (CO), NH wherein R₁₁ is optionally substituted with C_{1-12} -alkyl, C_{3-12} -cycloalkyl, C_{1-6} -alkoxy, C_{1-6} -alkyl, aryl, heteroaryl; and

Q and P are independently selected from the group consisting of <u>hydrogen</u>, -CN, COR_5 , $COOR_5$, $N(R_6, R_7)$, $CON(R_6, R_7)$, CH_2NO_2 , CH_2R_8 , CHR_9 , -CH=N-OR₁₀, C=CH-R₅, wherein R₅ is selected from the group consisting of H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, aryl, heteroaryl; R_6 and R_7 are independently selected from the group consisting of H, optionally substituted C_{1-12} alkyl, C_{3-12} cycloalkyl, C_{1-6} alkoxy; R_8 and R_9 are independently selected from the group consisting of H, C_{1-6} alkyl, F, Cl, Br, C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, C_{1-6} alkyl, wherein C_{1-12} alkyl substituted with one or more of F, Cl, Br, I, C_{1-6} alkyl, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkyl, aryl, heteroaryl except C_{1-12} alkyl, C_{1

wherein M = Sulphur is shown by compounds of Formula III,

FORMULA III

wherein P, Q, U, V, X, Y, Z, W and n in Formula III are the same as previously defined, wherein the process comprising reacting a compound of Formula V

Page 20

FORMULA V

with a compound of Formula VI

wherein the transformation is carried out in the presence of carbon monoxide and a catalyst, wherein P, Q, R_{127} Y, Z, G_7 n, U and V are the same as defined earlier, R_{12} is a leaving group selected from the group consisting of -CHO, fluoro, chloro, bromo, SCH₃, -SO₂CH₃, -SO₂CF₃ or OC₆H₅, G is NH.

- 35. (Previously Added) A process for preparing a compound of Formula II as claimed in claim 34, in a solvent selected from the group consisting of dimethylformamide, dimethylacetamide, ethanol or ethylene glycol at a temperature in the range of -70°C to 180°C in the presence of a base selected from the group consisting of triethyl amine, diisopropyl amine, potassium carbonate and sodium bicarbonate.
- 36. (Previously Added) A process of preparing a compound of Formula II as claimed in claim 34, wherein Formula VI is furaldehyde and reductive alkylation of the amine of Formula V is performed with a reducing agent.

MEHTA et al. Serial No. 10/051,784

> Filed: 1/17/2002 Page 21

- 37. (Previously Added) A process for preparing a compound of Formula II as claimed in claim 34, wherein Formula VI is furoic acid.
- 38. (Currently Amended) A process for preparing a compound of Formula II as claimed in claim 34, wherein the compounds of Formula II having carbonyl link are prepared by reacting a heteroaromatic compound of the Formula VI including N-methyl pyrrole with the intermediate amine of Formula V in the presence of triphosgene or phosgene and carbonyl linkers are introduced between heteroaromatic compound comprising reacting 3- bromothiophene and amine of Formula V with carbon monoxide and the catalyst is selected from the group consisting of Pd (PPh₃)₂Cl₂ and extended chain pyrroles having dicarbonyl linkers are obtained by treatment of oxalyl chloride and amine of the Formula V.
- 39. (Cancelled)